EXCERPTED FROM ECOLOGY & ENVIRONMENT, INC. — SCREENING SITE INSPECTION REPORT, SEPT. 13, 1991

ENTERED

2. SITE BACKGROUND

MAGNODE IS ONLY AN ACTIVE ALUMINUM EXTRUSION PLANT AND HAS NEVER CONDUCTED ANY OF THE LISTED FINISHING PROCESSES.

2.1 INTRODUCTION

This section presents information obtained from SSI work plan preparation, the site representative interview, and the reconnaissance inspection of the site.

2.2 SITE DESCRIPTION

The MPI site is an approximately 9.8-acre parcel of land owned by Magnode Corporation. The site is occupied by an active magnesium and aluminum extrusion plant that conducts finishing processes such as etching, sulphuric acid anodizing, electrolytic coloring, and chromate conversion coating. Magnode custom forms parts for a variety of industrial companies. The MPI site is located on the eastern side of the city of Trenton at 400 East State Street, Trenton, Butler Madison County, Ohio (SE1/4SW1/4 sec. 32, T.2N., R.4E.) (see Figure 2-1 for site location). The site is approximately 20 feet south of Baltimore and Ohio Railroad tracks and approximately 2,000 feet west of the Great Miami River. The land north and east of the MPI site is sparsely populated. The land south and west of the site is moderately populated with light commercial and industrial companies.

FALSE X

FALSE X

FALSE

A 4-mile radius map of the MPI site is provided in Appendix A.

2.3 SITE HISTORY

Magnode Products, Inc., purchased a 1.8-acre parcel of land for its Trenton, Ohio, manufacturing facility in October 1950 from Schaible Company (Picard 1990). Between 1910 and 1950, the parcel of land was

occupied by an automobile repair shop of unknown ownership. Between 1957 and 1979 Magnode Products, Inc., purchased four adjacent parcels of land. Two of the four parcels were purchased from the City of Trenton in July 1979. A third parcel was purchased from Thornton and Elizabeth Shockey in December 1957, and the fourth was purchased from Mr. and Mrs. Lawrence Martin, Jr., in April 1979 (Picard 1990). No information concerning prior use of these parcels is available. Together, the four parcels and the original 1.8-acre parcel of land constitute the site. In February 1980, Magnode Products, Inc., merged with Magnode Corporation, which is now the current owner and operator of the site (Picard 1990).

SHOULD READ: BEGAN OPERATION OF AN EXTRUSION PRESS

On-site operations first began in 1952 when Magnode Products, Inc., began stamping out parts with an on-site press (Adams et al. 1990). Aluminum extrusion operations began in 1959 and continue up to the present. Magnode Corporation also operated a magnesium extrusion process; UNTIL 1985 the date in which this process began is not known.

Both solid and liquid wastes are generated at the plant. Scrap aluminum is the main solid waste generated at the site. All scrap aluminum is melted down and recycled (Adams et al. 1990). It is not known when Magnode Corporation began using magnesium. Until 1980, the company recycled its own scrap magnesium. From 1980 to 1984, Magnode Corporation sold its scrap magnesium to Dow Chemical. Magnode Corporation stopped using magnesium in 1984. Waste quench water, waste solvents, and waste die etch solution are also produced at the plant. The waste cleaning solvents are picked up and transported off-site for recycling (Adams et al. 1990). Waste die etch solution (sodium hydroxide) is stored in two 3,000-gallon tanks and is later transported off-site by a licensed hazardous waste hauler (Adams et al. 1990). These on-site storage tanks are surrounded by a concrete secondary containment structure that collects spills and overflow. An OEPA inspection conducted on April 19, 1989, revealed several violations at the site regarding improper labeling of storage tanks containing hazardous waste and inadequacies in on-site secondary containment structures (Adams 1989). By August 1989, Magnode Corporation had rebuilt an adequate secondary containment structure, labeled all hazardous waste containers, and

MAGNODE DID NOT REBUILD THE CONTAINMENT STRUCTURE BUT SIMPLY COATED IT TO SEAL HAIRLINE CRACKS IN THE CONCRETE.

AIR COOLING IS STILL USED FOR ABOUT 60% OF PRODUCTION

implemented a hazardous waste training program for employees who work with hazardous wastes (Adams et al. 1990).

Since 1963, when the company switched from air cooling extruded parts to water quenching extruded parts, waste quench water has been generated on-site (Adams et al. 1990). It is not known how this waste quench water was disposed of between 1963 and 1967. In 1967, an on-site lagoon was excavated for the collection of quench water overflow, as well as for roof and parking lot rain water runoff (Adams et al. 1990). This lagoon was located in the northeast portion of the site.

NO "DISPOSAL" REQUIRED BECAUSE QUANTITIES WERE & ARE VERY SMALL

In 1973, the lagoon was filled in and a cast storage house constructed over the filled lagoon. Between 1973 and 1979, a temporary lagoon was excavated just south of the new cast storage house. This temporary lagoon was created for the collection of rain water runoff and overflow from quench water baths located in the northeast corner of the site. In 1979, an addition was built onto the southern end of the cast storage house and the temporary lagoon was filled in. Magnode Corporation purchased a parcel of land adjacent to the northeast corner of the site from Mr. and Mrs. Martin, and excavated a third lagoon on-site for the collection of rain water runoff and quench water overflow (Adams et al. 1990; Picard 1990). All of the on-site lagoons were unlined (U.S. EPA 1985). The third lagoon is still active and is completely fenced with a locked gate.

No regulatory related activities have taken place regarding the site.

IN 1967, A LAGOON WAS EXCAVATED PRIMARILY FOR STORM WATER; NO CONTACT COOLING WATER IN A VOLUME SUFFICIENT TO REQUIRE A MEANS OF DISPOSAL WAS GENERATED UNTIL 1980.

THE "QUENCH WATER BATHS" USED TO COOL THE ALUMINUM LOGS PULLED FROM THE HOMOGENIZERS DID NOT BECOME OPERATIONAL UNTIL 1980. ONLY THE PRESENT LAGOON HAS RECEIVED "QUENCH WATER" ON A REGULAR BASIS.

FIT observed steel frames just south of the lagoon in the northeast corner of the site. A 30,000-gallon aboveground storage tank was located east of the steel frames. This storage tank used to contain propane; however, it has since been flushed with nitrogen and is now empty. Scrap aluminum is stored in a scrap pile just west of the aluminum cast storage house, as well as in an employee parking lot in the southwest corner of the site. Although this area is normally used as an employee parking lot, this area is currently being used as a temporary storage area for scrap aluminum because of a large inventory of aluminum scrap. A 6,000-gallon and a 9,000-gallon aboveground storage tank, both containing liquid nitrogen, were located west of the number 5 press building. Approximately 40 rusty, empty drums were observed on wooden pallets approximately 20 feet northeast of the two quench water ovens. Most of these drums had contained cutting oil (Adams et al. 1990). Approximately 10 empty drums were observed just northwest of the aluminum cast storage house and along the northwest fence. These drums allegedly contained cutting oil. Several of these drums were lying on their sides on a small patch of black soil.

Aluminum billets were stored east and northeast of the aluminum cast storage house, west of the scrap pile in the southwest corner of the site, and along the site's northwest border. The number 5 press building had an awning over the eastern half of its north wall. Billets, wooden pallets, and drums were stored under the awning. Some of these drums appeared to be empty; others may have contained cutting oil.

The active lagoon, which is approximately 100 feet long by 40 feet wide and 10 to 12 feet deep, is in the northwestern corner of the site. The lagoon is unlined and has steeply sloped banks. The water level was approximately 3 feet below ground level at the time of the FIT SSI. The water in the lagoon was very clear. FIT observed algae-covered metal debris near the lagoon's northern edge. Several turtles and frogs were observed by FIT in and around the lagoon.

Drains collecting runoff from the on-site roofs and parking lots lead to the lagoon. According to Fraley, each loading dock and truck well area has a drain leading to the lagoon (Adams et al. 1990). A drain was also located just south of the die etch house. Occasionally,

THIS IS A FALSE STATEMENT; EVEN IF THE TANKS DID OVERFLOW THE CAUSTIC WOULD BE HELD IN THE CONTAINMENT AREA AND COULD NOT MIGRATE INTO THE LAGOON.

the spent sodium hydroxide solution from the die etch process overflows its holding tanks. It is possible that some of this solution can migrate into the lagoon.

FIT photographs from the SSI of the MPI site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine whether U.S. EPA Target Compound List (TCL) compounds or Target Analyte List (TAL) analytes were present at the site. The TCL and TAL are included with corresponding quantitation/detection limits in Appendix D.

FIT collected six soil/sediment samples on October 15, 1990, and three groundwater samples on October 16, 1990. The site representatives did not accept offered portions of the FIT-collected samples.

Soil/Sediment Sampling Procedures. All six soil/sediment samples (S1 through S6) were grab samples. Samples S1 and S2 were subsurface soil samples collected at depths of 7 feet, 10 inches, and 10 feet, 3 inches, respectively, from locations believed to be in the area of the former lagoons. Sampling locations S1 and S2 were approximately 40 and 30 feet south of the aluminum cast storage house, respectively (see Figure 3-2 for soil/sediment sampling locations).

Samples S3 and S4 were both surface sediment samples collected from the western and eastern sides of the active lagoon, respectively. Sample S3 produced a pungent, sulfur-like odor when it was collected.

Soil sample S5 was a surface soil sample collected from a 3 foot by 3 foot patch of discolored soil located near drums stored immediately northwest of the aluminum cast storage house. Soil sample S6 was collected as a potential background sample to determine the representative chemical content of the soil in the area of the site. Soil samples S5 and S6 were both collected at depths of approximately 2 to 3 inches. Sampling location S6 was in the bushes adjacent to the northwest corner of the office building.

A power auger and hand auger were used to collect samples S1 and S2. The remaining samples were collected with a trowel or spoon. The sample portions collected for volatile organic analysis were transferred

FEB 6, 1995 PRC QUESTION LIST

PRC Environmental Management, Inc Requests from Magnode Corporation

(1) - Map of site layout of Magnode Corporation detailing site features, preferably a map to scale

(2) - Records indicating the size and location of the inactive lagoons (e g subsurface map etc)

(3) - History of operations of the inactive lagoons (e g years of operation, spills cleanups sampling events, etc)

(4) - History of operations of the active lagoon (e g years of operation, spills, cleanups, sampling events etc)

(5) - Map indicating the location of all on-site wells, both closed and presently used with dates of operation

Magnode Corporation
Responses To February 6, 1995 PRC Question List

1 A site map is attached

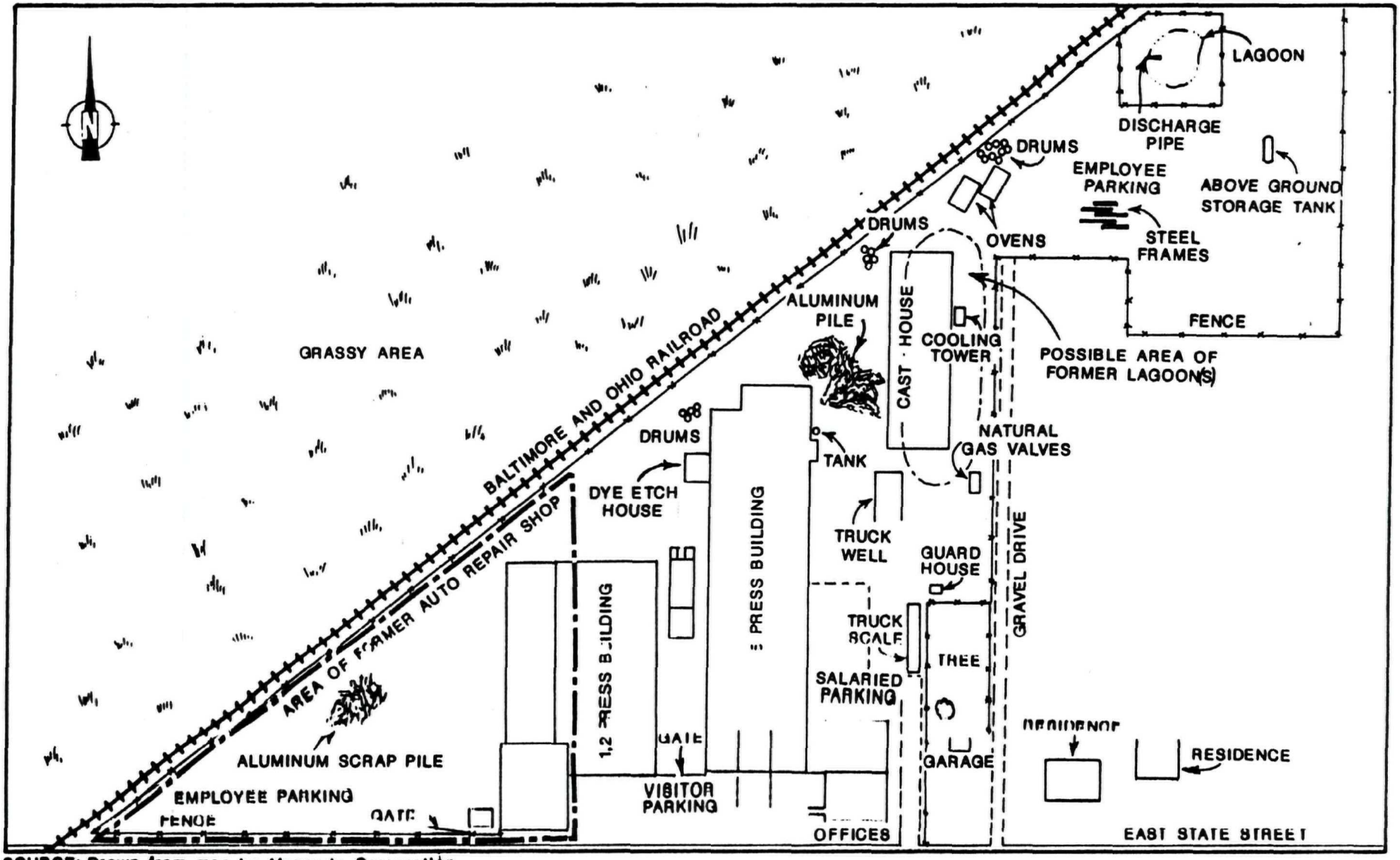
2 We are uncertain as to the exact sizes and locations of the inactive lagoons The previous contractor/USEPA had aerial photographs showing all previous lagoon locations Figure 3-1 from E&E s September 13 1991 report is attached and shows the former lagoon locations to be under or around the cast house

3 The inactive lagoons were constructed and operated primarily for storm water management Small amounts of quench water may have entered these lagoons inadvertently over the years Each extruder has a closed loop recirculating quench water system, i e the quench water does not flow ' once through the process Magnode currently uses and historically has used very few chemicals in its operation and consequently there is little opportunity for spills to occur much less to be discharged to a lagoon There is no history of spills cleanups or sampling events relative to the inactive lagoons It is believed that the initial lagoon was constructed in 1967 It is believed that this lagoon was backfilled in 1973 and a new lagoon excavated In 1979 or 1980 this second lagoon was backfilled and replaced by the current lagoon

4 The present lagoon became operational in 1979 or 1980 This lagoon also receives primarily stormwater although, unlike the earlier lagoons it also receives contact cooling water from the aluminum casting and homogenizing operations which became operational in 1980 The present lagoon has been sampled periodically since February, 1992 These data are available and PRC has been provided copies of the data from the last several sampling events There is no evidence of any spills or cleanups regarding the present lagoon

5 The only water well on-site is located near the north east corner of the cast house This well was formerly used by the City of Trenton as a public water supply (See drawing for location) Magnode uses the well to supply water to the casting/homogenizing operation The well pump capacity is approximately 93 gallons/minute The city has been contacted concerning the well and could not supply any additional information except that the well was drilled at least 20 years ago

EXCERPTED FROM E&E's SCREENING SITE INSPECTION REPORT, 9-13-91



SOURCE: Drawn from map by Magnode Corporation.

SCALE

0 100 200 300 400 500 FEET

FIGURE 3-1 SITE FEATURES

FEB 8, 1995 PRC QUESTION LIST

QUESTIONS REGARDING MAGNODE CORPORATION, PREVIOUSLY MAGNODE PRODUCTS INC , IN TRENTON, OHIO

1) How many workers are on site?
2) Have any reports or complaints been filed by facility workers regarding exposures or illnesses related to the site?
3) What is the discharge rate to the active impoundment?
4) When were any on-site impoundments, both currently inactive and active used by Magnode? Please provide a timeline
5) What was the process/procedure by which the currently inactive impoundments were closed?
6) How much soil cover if any, was used to close the currently inactive impoundments?
7) How was contact and non-contact quench water disposed of between 1963 and 1967?
8) What years did Magnode Corp operate magnesium extrusion processes?
9) What years did Magnode Corp operate aluminum extrusion processes?
10) What are the current disposal practices of the die etch solution, NaOH?
11) What are the current disposal practices of hydraulic fluid, solvents, and other industrial wastes generated on-site?
11) What is RCRA status of Magnode Corp ?
12) What if any changes have taken place at Magnode Corp between 1990 to current concerning on-site production and processes, waste management and disposal practices and site layout?

Magnode Corporation
Responses To February 8, 1995 PRC Question List

1 Magnode has approximately 160 employees

2 No reports of complaints of exposure or illness related to the site have been filed by employees

3 The discharge rate to the active lagoon is estimated as follows
Contact Cooling Water 6 000 to 8 000 gallons/day
Stormwater 125 000 gallons per inch of rainfall (based on 200 000 square feet paved or under roof)

4 Periods of inactive and active lagoon usage
Lagoon #1 1967 1973
Lagoon #2 1973 - 1979 or 1980
Present Lagoon 1979 or 1980 to present

5 The process of closing the inactive lagoons is unknown, but presumably involved backfilling It is unknown if the inactive lagoons were backfilled with on-site material or off site material hauled in for that purpose

6 It is unknown how much soil was used to backfill the inactive lagoons

7 In regard to the quench water used on the aluminum extruders it is important to note that this water is (and was) recirculated through a cooling tower and continuously reused with very little loss i e a lagoon would not be required for the small quantities of quench water lost from the extrusion operations For the 1963 through 1967 time period the fate of the quench water and storm water is unknown

8 Magnode operated magnesium extrusion processes from 1952 or 1953 through 1985

9 Magnode has operated aluminum extrusion processes since 1953 or 1954

10 The die cleaning solution is currently being sold to General Motors for use in their industrial pretreatment plant in Kettering Ohio as a replacement for virgin caustic

11 Only small amounts of chemical wastes are generated on site All waste oils and solvents are properly disposed of by Safety Kleen Only 173 gallons of hazardous waste (solvent) was disposed of via Safety Kleen in 1994

12 Implementation of the caustic reuse program has reduced Magnode from a large quantity generator to a conditionally exempt small quantity generator A RCRA classification change request was submitted to Ohio EPA on January 5 1995 (Copy attached)

13 Except for the caustic reuse program with General Motors and recycling of cardboard and paper little has changed at the site since 1990 The production processes and site layout have not changed significantly

MAGNODE

Magnode Corporation 400 East State Street Trenton Ohio 45067 (513) 988-6351 TLX 28 8277

January 5 1995

Ms Maria Velalif, Notification Coordinator
Ohio EPA Division of Hazardous Waste Management
P O Box 163669
Columbus Ohio 43216-3669

Dear Ms Maria Velalif

I am writing to notify you that the Magnode Corporation has begun a recycle program to decrease their quantity of hazardous waste disposal As of September 1994 Magnode has been selling their spent caustic solution to another industry The other industry uses the caustic for pH adjustments in their industrial wastewater pretreatment facility This program allows the caustic solution to be reclassified as a recycle/reuse product

Magnode still operates a Safety Kleen Station that generates about 1000 pounds of hazardous waste per year (less than 100 lbs/mo) Due to these changes Magnode can be declassified as a Large Quantity Generator and reclassified as a Conditionally Exempt Small Quantity Generator

If you have any questions or need additional information please contact Michael Giffen at (513) 890-7688 The address and Ohio EPA ID number for Magnode are given below

Magnode Corporation
Ohio EPA ID OHD 004232823
400 East State Street
Trenton OH 45067-1599

Sincerely
Magnode Corporation

Johnnie L Adams V P Manufacturing

cc Michael Giffen Crown Environmental Group
Paul Fraley Jr PE CEG